

Part 1 - Appendix 3C
Evergy Reports

Missouri 4 CSR 240-22.030 (7)(A)(7) Reporting Requirements
Load Analysis and Forecasting

The utility shall provide plots fo the net system load profiles for the summer peak day and the winter peak day showing the contribution of each major class. The plots shall be provided in the triennial filing for the base year of the forecast and for the fifth, tenth, and twentieth years of the forecast. Plots for all years shall be included in the workpapers supplied at the time of the triennial filing.

Compliance: See Plots 3C-1 through 3C-5 for base-case MO West forecast reports designed to comply with section (7)(A)(7) reporting requirements.

Linked Files:

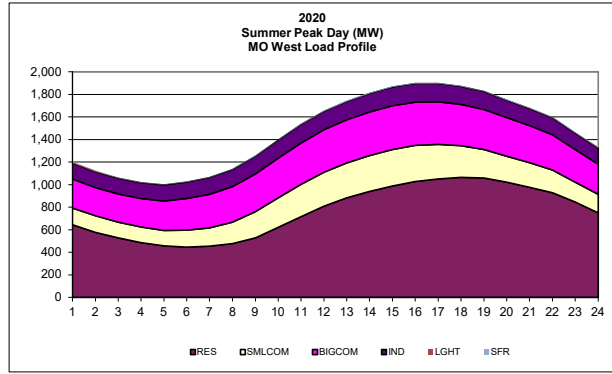
7_Data_Calib.xls

West_SystemLoad.ltm

System.ltm

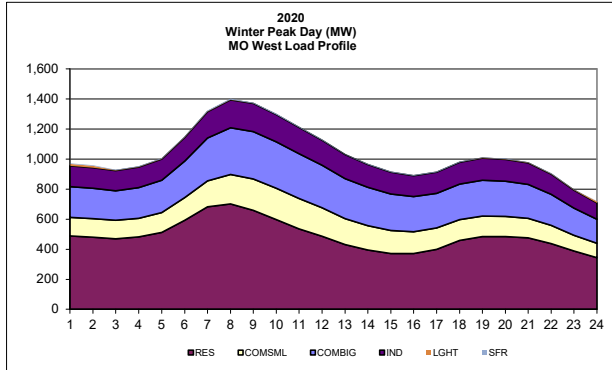
Plot 3C-1 MO West System Peak Day Loads by Class (Summer 2020)
Summer Peak Day (MW)

		MO West						
Date	Hr	RES	SMLCOM	BIGCOM	IND	LGHT	SFR	Total
7/16/20	1	644	150	256	141	9	4	1,200
7/16/20	2	578	145	251	140	9	4	1,122
7/16/20	3	528	140	249	139	2	3	1,058
7/16/20	4	487	137	253	140	2	3	1,019
7/16/20	5	456	139	260	141	2	3	999
7/16/20	6	447	151	280	144	2	3	1,024
7/16/20	7	454	163	298	147	-	3	1,063
7/16/20	8	477	191	313	152	-	4	1,133
7/16/20	9	529	234	335	156	-	4	1,253
7/16/20	10	621	262	352	159	-	4	1,393
7/16/20	11	716	288	367	162	-	5	1,532
7/16/20	12	809	302	376	163	-	5	1,650
7/16/20	13	883	310	383	164	-	6	1,739
7/16/20	14	940	317	387	165	-	6	1,809
7/16/20	15	990	322	388	165	-	6	1,865
7/16/20	16	####	321	384	164	-	6	1,896
7/16/20	17	####	308	376	162	-	6	1,896
7/16/20	18	####	281	365	159	-	6	1,871
7/16/20	19	####	253	354	157	-	6	1,824
7/16/20	20	####	230	343	154	-	6	1,750
7/16/20	21	979	217	329	152	2	5	1,678
7/16/20	22	928	202	312	149	2	5	1,594
7/16/20	23	846	177	288	145	2	5	1,459
7/16/20	24	751	163	267	142	9	4	1,332



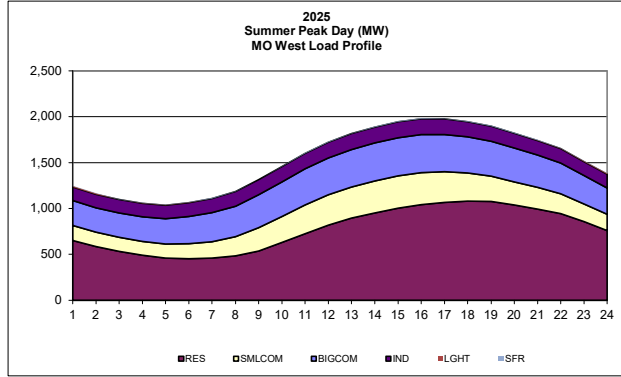
Plot 3C-2 MO West System Peak Day Loads by Class (Winter 2020)
Winter Peak Day (MW)

		MO West						
Date	Hr	RES	COMSML	COMBIG	IND	LGHT	SFR	System
2/14/20	1	487	125	204	139	13	4	968
2/14/20	2	480	125	201	137	13	4	955
2/14/20	3	470	122	197	134	2	4	926
2/14/20	4	481	125	204	136	3	4	949
2/14/20	5	513	132	214	141	3	4	1,003
2/14/20	6	595	149	245	156	3	4	1,147
2/14/20	7	682	173	286	174	3	5	1,318
2/14/20	8	703	195	311	185	2	6	1,397
2/14/20	9	658	210	316	186	-	6	1,370
2/14/20	10	598	209	309	181	-	5	1,297
2/14/20	11	536	202	298	175	-	5	1,211
2/14/20	12	487	189	283	167	-	4	1,126
2/14/20	13	431	173	267	158	-	4	1,029
2/14/20	14	396	162	255	152	-	4	964
2/14/20	15	372	153	243	145	-	3	913
2/14/20	16	371	146	232	140	-	3	890
2/14/20	17	400	142	229	141	-	3	913
2/14/20	18	458	139	237	146	-	4	980
2/14/20	19	484	137	238	147	1	4	1,007
2/14/20	20	484	135	234	145	3	4	1,000
2/14/20	21	476	131	225	141	3	4	976
2/14/20	22	438	121	207	133	2	4	901
2/14/20	23	387	105	181	120	2	3	795
2/14/20	24	345	96	159	109	11	3	719



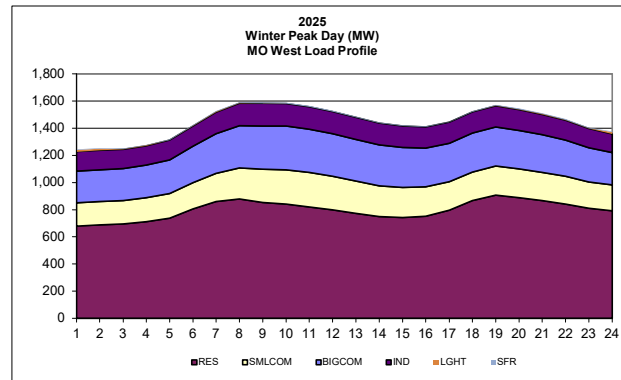
Plot 3C-3 MO West System Peak Day Loads by Class (Summer 2025)
Summer Peak Day (MW)

		MO West						
Date	Hr	RES	SMLCOM	BIGCOM	IND	LGHT	SFR	Total
7/17/25	1	651	164	274	147	9	4	1,245
7/17/25	2	584	157	268	146	9	4	1,164
7/17/25	3	533	152	266	145	2	3	1,099
7/17/25	4	491	149	270	146	2	3	1,059
7/17/25	5	460	151	278	147	2	3	1,038
7/17/25	6	452	164	299	150	2	3	1,067
7/17/25	7	460	177	318	154	-	3	1,109
7/17/25	8	484	207	335	159	-	4	1,185
7/17/25	9	536	254	358	163	-	4	1,312
7/17/25	10	629	285	377	166	-	5	1,458
7/17/25	11	725	313	394	169	-	5	1,602
7/17/25	12	820	329	404	171	-	5	1,723
7/17/25	13	895	338	411	172	-	6	1,816
7/17/25	14	953	346	416	173	-	6	1,888
7/17/25	15	1,004	351	417	173	-	6	1,945
7/17/25	16	1,042	351	412	172	-	6	1,976
7/17/25	17	1,065	336	404	170	-	6	1,976
7/17/25	18	1,082	306	392	167	-	6	1,947
7/17/25	19	1,077	275	380	165	-	6	1,897
7/17/25	20	1,038	251	369	162	-	6	1,820
7/17/25	21	994	236	353	159	2	5	1,744
7/17/25	22	942	220	335	157	2	5	1,656
7/17/25	23	858	192	309	152	2	5	1,514
7/17/25	24	760	177	287	149	9	4	1,382



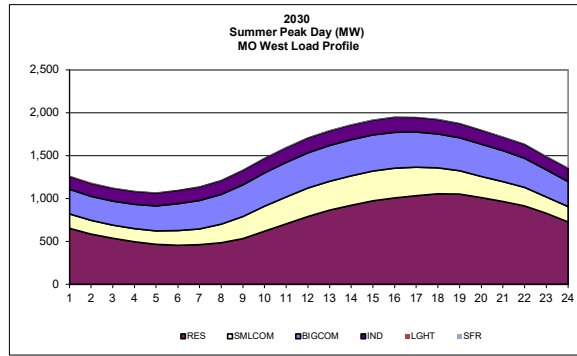
Plot 3C-4 MO West System Peak Day Loads by Class (Winter 2025)
Winter Peak Day (MW)

		MO West						
Date	Hr	RES	SMLCOM	BIGCOM	IND	LGHT	SFR	Total
1/10/25	1	679	170	234	142	13	4	1,239
1/10/25	2	688	172	234	141	13	4	1,249
1/10/25	3	694	174	235	141	2	5	1,246
1/10/25	4	711	178	241	142	2	5	1,274
1/10/25	5	737	182	248	143	3	5	1,313
1/10/25	6	806	194	267	149	3	5	1,419
1/10/25	7	859	209	292	158	3	6	1,521
1/10/25	8	879	228	311	165	3	6	1,586
1/10/25	9	854	245	318	166	0	6	1,584
1/10/25	10	841	254	321	166	-	6	1,581
1/10/25	11	818	255	319	166	-	6	1,558
1/10/25	12	799	248	313	164	-	6	1,523
1/10/25	13	774	237	307	162	-	6	1,480
1/10/25	14	748	228	301	160	-	5	1,437
1/10/25	15	741	222	294	157	-	5	1,415
1/10/25	16	752	216	286	155	-	5	1,408
1/10/25	17	795	212	282	154	-	5	1,443
1/10/25	18	867	210	287	154	0	6	1,519
1/10/25	19	908	213	289	155	2	6	1,567
1/10/25	20	889	210	285	152	3	6	1,539
1/10/25	21	868	207	277	150	3	6	1,504
1/10/25	22	841	204	267	147	3	6	1,461
1/10/25	23	809	195	251	141	3	5	1,399
1/10/25	24	791	192	238	136	14	5	1,371



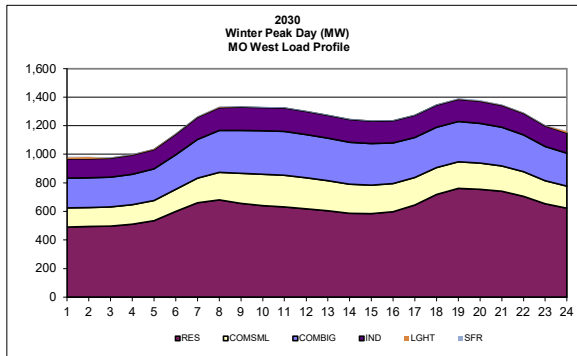
Plot 3C-5 MO West System Peak Day Loads by Class (Summer 2030)
Summer Peak Day (MW)

		MO West							
Date	Hr	RES	SMLCOM	BIGCOM	IND	LGHT	SFR	Total	
7/17/30	1	654	168	285	150	9	4	####	
7/17/30	2	587	162	279	150	9	4	####	
7/17/30	3	536	158	277	149	2	3	####	
7/17/30	4	496	155	282	150	2	3	####	
7/17/30	5	466	157	290	151	2	3	####	
7/17/30	6	457	170	313	154	2	3	####	
7/17/30	7	465	184	331	157	-	3	####	
7/17/30	8	485	215	347	162	-	4	####	
7/17/30	9	533	261	370	166	-	4	####	
7/17/30	10	619	291	388	168	-	4	####	
7/17/30	11	705	316	403	171	-	5	####	
7/17/30	12	793	329	412	171	-	5	####	
7/17/30	13	865	338	418	172	-	6	####	
7/17/30	14	922	345	421	173	-	6	####	
7/17/30	15	975	348	422	173	-	6	####	
7/17/30	16	1,009	347	418	172	-	6	####	
7/17/30	17	1,035	333	409	169	-	6	####	
7/17/30	18	1,055	303	398	167	-	6	####	
7/17/30	19	1,052	272	385	165	-	6	####	
7/17/30	20	1,011	248	374	162	-	6	####	
7/17/30	21	965	233	359	160	2	5	####	
7/17/30	22	914	217	341	157	2	5	####	
7/17/30	23	828	191	316	154	2	5	####	
7/17/30	24	730	177	294	151	9	4	####	



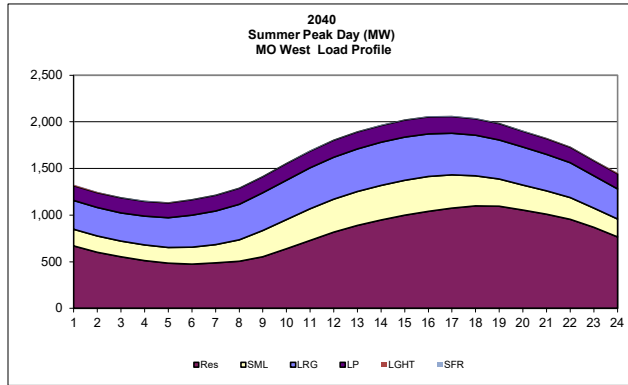
Plot 3C-6 MO West System Peak Day Loads by Class (Winter 2030)
Winter Peak Day (MW)

		MO West							
Date	Hr	RES	COMSML	COMBIG	IND	LGHT	SFR	System	
1/10/30	1	491	133	210	133	12	3	980	
1/10/30	2	494	134	209	133	12	3	981	
1/10/30	3	497	134	209	132	2	3	975	
1/10/30	4	510	137	214	133	2	4	997	
1/10/30	5	535	142	222	136	2	4	####	
1/10/30	6	600	155	243	143	2	4	####	
1/10/30	7	660	173	272	153	2	4	####	
1/10/30	8	680	194	292	161	3	5	####	
1/10/30	9	655	211	301	163	0	5	####	
1/10/30	10	641	219	305	163	-	5	####	
1/10/30	11	631	222	306	164	-	5	####	
1/10/30	12	618	217	302	162	-	5	####	
1/10/30	13	605	209	299	160	-	5	####	
1/10/30	14	586	203	295	159	-	5	####	
1/10/30	15	584	201	291	157	-	4	####	
1/10/30	16	598	196	285	155	-	4	####	
1/10/30	17	646	192	280	155	-	5	####	
1/10/30	18	719	188	282	156	0	5	####	
1/10/30	19	761	186	282	156	2	5	####	
1/10/30	20	755	183	279	155	3	5	####	
1/10/30	21	740	179	271	152	3	5	####	
1/10/30	22	706	172	258	149	2	5	####	
1/10/30	23	655	160	241	143	2	4	####	
1/10/30	24	622	156	231	140	13	4	####	



Plot 3C-7 MO West System Peak Day Loads by Class (Summer 2040)
Summer Peak Day (MW)

		MO West						
Date	Hr	Res	SML	LRG	LP	LGHT	SFR	Total
7/17/40	1	670	179	310	157	9	4	1,325
7/17/40	2	603	173	305	157	10	4	1,248
7/17/40	3	553	169	304	157	3	3	1,185
7/17/40	4	512	167	309	158	3	3	1,148
7/17/40	5	483	169	319	159	3	3	1,133
7/17/40	6	474	183	343	162	2	3	1,165
7/17/40	7	486	197	363	166	-	3	1,212
7/17/40	8	506	230	380	171	-	4	1,287
7/17/40	9	553	280	405	175	-	4	1,413
7/17/40	10	640	311	424	177	-	4	1,552
7/17/40	11	728	339	440	179	-	5	1,686
7/17/40	12	817	353	450	180	-	5	1,801
7/17/40	13	891	362	457	181	-	6	1,891
7/17/40	14	949	370	461	182	-	6	1,961
7/17/40	15	1,000	374	462	181	-	6	2,018
7/17/40	16	1,042	373	457	180	-	6	2,051
7/17/40	17	1,074	358	447	177	-	6	2,057
7/17/40	18	1,098	325	434	175	-	6	2,031
7/17/40	19	1,096	291	421	172	-	6	1,979
7/17/40	20	1,056	265	409	169	-	6	1,899
7/17/40	21	1,010	250	393	167	2	5	1,821
7/17/40	22	955	233	374	165	2	5	1,729
7/17/40	23	867	206	347	162	2	5	1,584
7/17/40	24	766	191	324	160	9	4	1,450



Plot 3C-8 MO West System Peak Day Loads by Class (Winter 2040)
Winter Peak Day (MW)

		MO West						
Date	Hr	Res	SML	LRG	LP	LGHT	SFR	Total
1/10/40	1	629	165	236	142	13	4	1,186
1/10/40	2	629	166	235	142	13	4	1,184
1/10/40	3	627	166	235	141	2	4	1,171
1/10/40	4	636	169	240	142	2	4	1,189
1/10/40	5	664	174	249	145	2	4	1,234
1/10/40	6	729	187	271	153	3	5	1,341
1/10/40	7	790	206	302	163	3	5	1,465
1/10/40	8	791	228	323	172	3	5	1,517
1/10/40	9	742	244	330	173	0	5	1,490
1/10/40	10	693	246	330	172	-	5	1,440
1/10/40	11	646	243	327	171	-	5	1,387
1/10/40	12	611	233	319	168	-	5	1,332
1/10/40	13	577	223	314	165	-	5	1,279
1/10/40	14	552	215	307	164	-	4	1,238
1/10/40	15	538	210	302	161	-	4	1,212
1/10/40	16	550	204	295	159	-	4	1,208
1/10/40	17	601	200	291	158	-	4	1,250
1/10/40	18	684	195	294	160	0	5	1,333
1/10/40	19	722	191	293	160	2	5	1,368
1/10/40	20	718	185	288	158	3	5	1,352
1/10/40	21	703	180	279	156	3	5	1,321
1/10/40	22	657	170	265	152	2	4	1,246
1/10/40	23	593	156	245	145	2	4	1,142
1/10/40	24	553	152	233	141	13	4	1,091

